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HOUSEKEEPERS' CHAT

Thursday, October 29, 1936

(FOR BROADCAST USE ONLY)

Subject: "CONSUMER FACTS ABOUT EGG SEASONS." Information from the Bureau of Chemistry and Soils and the Bureau of Agricultural Economics of the Department of Agriculture, and the Consumers' Counsel of the Agricultural Adjustment Administration.

--ooOoo--

If people wanted their breakfast eggs only at the time of year that it suits hens best to provide them, there'd be no difficulty about the fresh egg supply, and we'd have no story for you today.

As it is, though, hens prefer to do the biggest part of their year's work at one time of the year. In March, April, May and June, when green feed seems most appetizing to hens, they lay far more eggs than consumers want. Then they slack off and in spite of modern methods of keeping them at their job the year around, most hens don't operate on schedules that suit consumers.

The solution, naturally, is some way of saving the eggs from the flush season for the slack season. And that's a problem the trade, with the help of scientists in the Department of Agriculture, has been working on for a long time -- trying to improve our American cold storage methods so that the consumers will find eggs several months old just as acceptable as those only days or weeks old.

The term "cold storage" used to be an insult to an egg. That dates back to the days when egg handlers didn't know some of the salient facts about keeping eggs fresh. For instance, they'd be inclined to chuck almost any kind of egg into storage. Naturally, you couldn't expect the egg to come out of storage any better or fresher than it was when it went in.

Simple and obvious corrections to storage practices have helped boost the reputation of storage eggs. Nowadays many egg farmers gather their eggs three or four times a day and cool them at once. Arrangements are made for all handling and transportation to be done at low temperatures. Refrigerator cars did their share and nowadays refrigerated trucks are completing the cooled journey from farm to consumer.

Grading now takes place all along the line. The farmer sometimes candles his eggs before he sells them as fresh or sends them to a storage warehouse. Eggs usually get graded before they enter storage rooms, so that the ones that don't deserve storage don't get it. Then they're graded again when they come out of storage.

Cartons of eggs sold in an increasing number of groceries in large cities often bear a dated seal indicating a Government grade. But remember that the highest grade eggs may deteriorate after they're graded if they're left around in a warm grocery store, or displayed in a sunny window. The wise consumer buys eggs out of a grocery refrigerator.

But these are elementary corrections to storage practice. There's more to this business than simply keeping eggs cold. In the Department of Agriculture we can learn of some new, more subtle scientific tricks coming into the trade that promise to smooth out the seasonal ups and downs of fresh egg supply.

Besides a cool temperature in the storage room, the air circulation must be good. Another problem is the porous quality of egg shells. Eggs absorb odors and flavors easily. If they're stored for any length of time near apples their apple taste is likely to disconcert their ultimate consumers. Nowadays the egg handlers make sure eggs don't associate with corrupting influences. The packing cases and materials come in for especial attention.

One of the most important new developments in storing eggs is the control of the humidity. Evaporation is the process that robs the egg of its marks of freshness. Setting the humidity at the right point checks this evaporation, as well as keeping down molds. Even some modern refrigerator trucks are humidified.

Another thing happens when the egg is in storage: It gives off carbon dioxide -- a colorless, odorless, and tasteless gas. When this happens, a chemical change takes place in the egg. So the storage people, with the help of the Department of Agriculture scientists, are learning to retard the loss of the gas. They regulate the air in some egg storage rooms so as to keep in it a definite amount of carbon dioxide.

Another thing modern egg-storers do is to coat the eggs with a pure tasteless mineral oil before putting them in storage. This oil treatment also helps to keep the moisture from evaporating out of the porous egg shell, and keeps foreign odors and bacteria from making their way in.

Here's where the newest trick to the trade comes into the egg storage picture. That is the "vacuum-carbon dioxide method", developed after years of study by the Bureau of Chemistry and Soils in the Department of Agriculture. According to this method prospective storage eggs are placed in a chamber which is filled half full of oil. Air is drawn out of the chamber until there is a vacuum. Then the eggs are immersed in the oil and brought up again above the surface. Then the vacuum is released, but not with ordinary air. The space is filled with carbon dioxide gas.

That's all there is to it, but it seems to be enough to do the job of keeping the eggs in storage at the same quality level at which they went into storage. That's the conclusion of some cooperative tests carried on by four bureaus in the Department of Agriculture: the Bureaus of Chemistry and Soils, Agricultural Economics, Home Economics and Animal Industry. These tests have shown too that oiling does not affect the flavor of eggs during storage.

Another result of these tests is that in spite of the fact that egg quality can be maintained during storage, there are connoisseurs who can still tell the difference between new-laid eggs and storage eggs. But that does not mean that the new-laid egg tastes better than the storage egg. In the tests some people preferred the storage egg.

Just the same, the difference in taste and flavor is much less noticeable today than it was a few years ago, and the day is in sight when consumers will love a May egg in December as much as they did in May.

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